DBI SALA®

The Ultimate in Fall Protection

flexiguard®

Boxed-Frame Rail Fall Arrest System

Model Numbers: *(See Inside Back Cover)*

USER INSTRUCTION MANUAL
BOXED-FRAME RAIL FALL ARREST SYSTEM

This manual is intended to meet industry standards, including OSHA and ANSI Z359.1-2007, and should be used as part of an employee training program as required by OSHA.

IMPORTANT: *If you have questions on the use, care, or suitability of this equipment for your application, contact Capital Safety.*

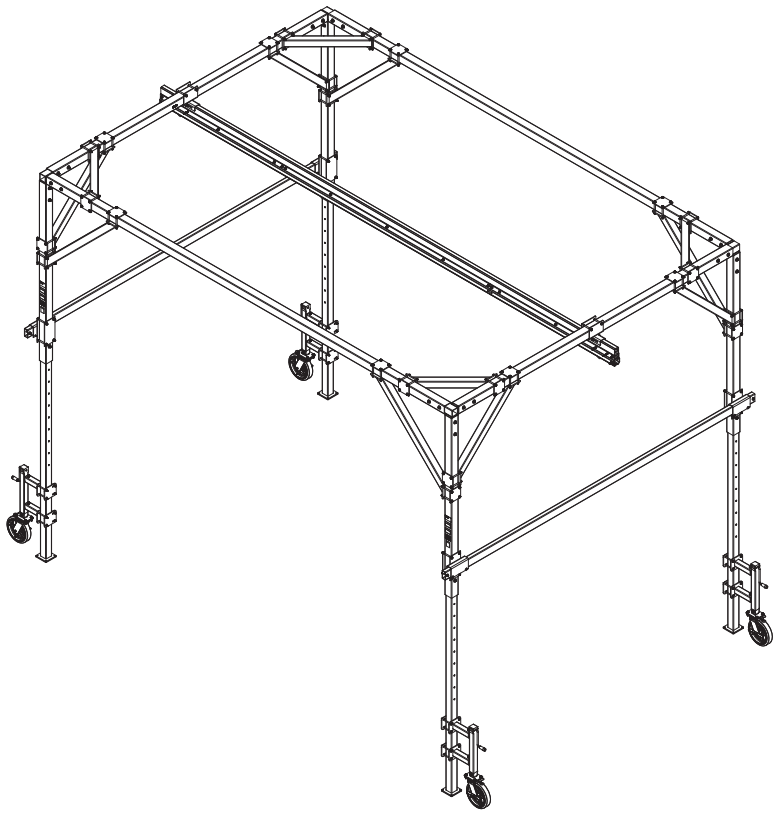
WARNING: *This product is approved for use with retractable devices and shock absorbers with a maximum arresting force (M.A.F.) rating of 900 lbs. (4 kN) or less. Retractable devices must be installed, maintained, and used according to the manufacturer's instructions.*

DESCRIPTION

BOXED-FRAME RAIL FALL ARREST SYSTEM: The four and/or six leg Boxed-Frame System is a frame supported trolley rail assembly for overhead anchorage of Capital Safety fall arrest or fall arrest restraint equipment. Wheeled trolleys travel along rail assemblies and serve as moving anchorage points for Self-Retracting Lifelines (SRLs) and Lanyards. The rail assemblies are supported in an overhead position by an overhead super structure. Swiveling wheel assemblies and top-wind jacks provide portability and secure positioning.

GLIDE RAIL: The Glide Rail System (Figure 2) is the main component of the frame system. It is a rail and trolley system for horizontal anchorage of Capital Safety personal fall arrest or fall restraint equipment. Wheeled Trolleys travel along a Rail Assembly and serve as moving anchorage points for Self Retracting Lifeline (SRLs) or Lanyards. Rail sections are supported from the overhead structure by Mounting Brackets comprised of various combinations of Beam Clamps, Connector Channels, and Extensions.

Figure 1 - FlexiGuard Boxed-Frame Rail Fall Arrest System (FAS)



NOTE: *This figure illustrates a Four-Leg Boxed-Frame System. Boxed-Frame Systems are custom designed to customer requirements and will vary with the intended application.*

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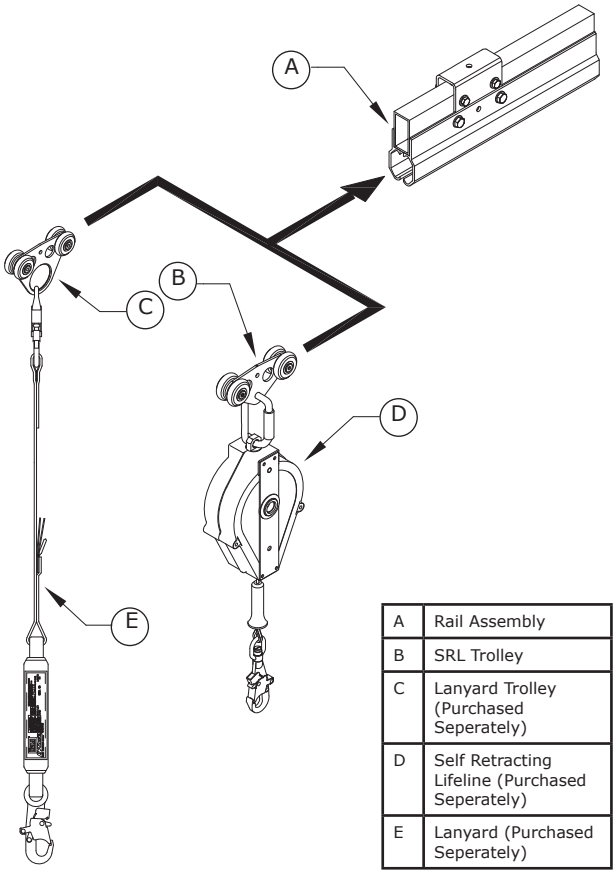
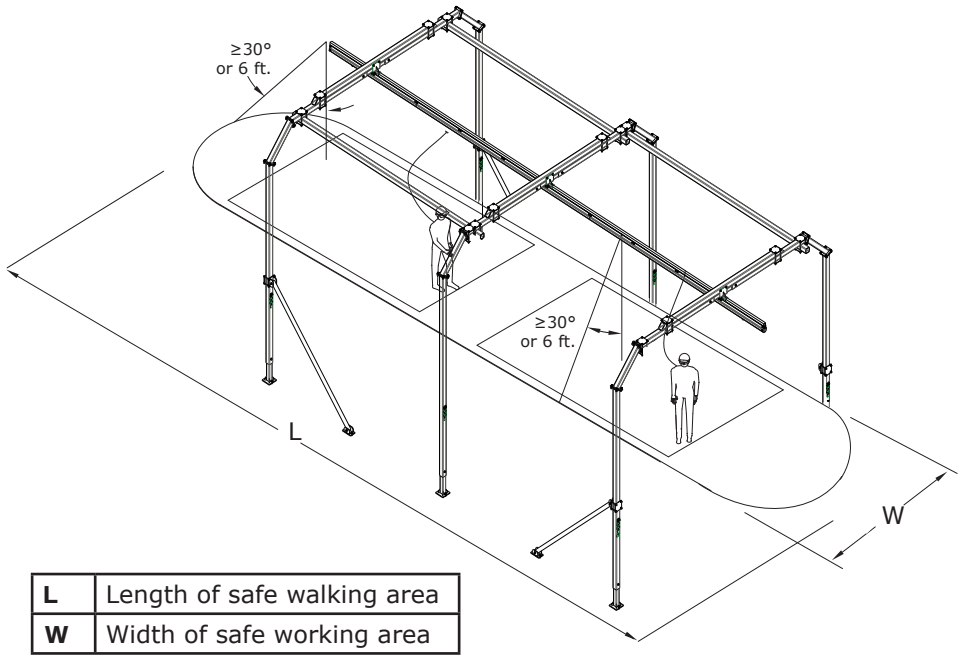
Figure 2 - Glide Evolution Rail System



A	Rail Assembly
B	SRL Trolley
C	Lanyard Trolley (Purchased Seperately)
D	Self Retracting Lifeline (Purchased Seperately)
E	Lanyard (Purchased Seperately)

Figure 3 - Typical System Layout Design



L	Length of safe walking area
W	Width of safe working area

SYSTEM DESIGN

HEAT: The frame system is not designed for use in high temperature environments (greater than 130° F, 54° C). Protection of the system must be provided if exposure to welding, metal cutting, or similar activities are expected.

CORROSION: System components may be damaged by exposure to environments where caustic vapors or chemicals are present. Do not install the frame system where rapid corrosion due to chemical attack could occur. Caution must be used to assure that small parts such as fasteners are not subjected to rapid galvanic corrosion due to contact with similar metals.

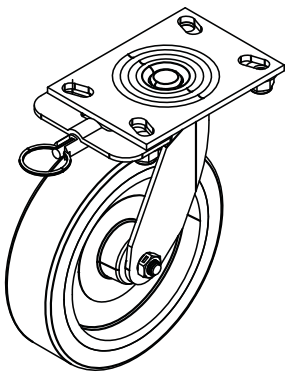
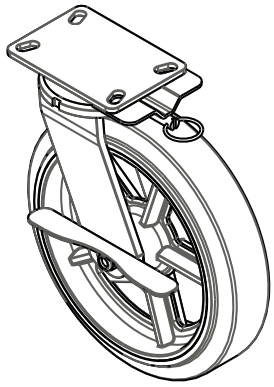
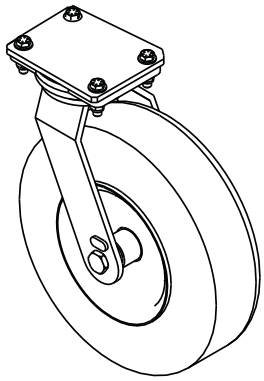
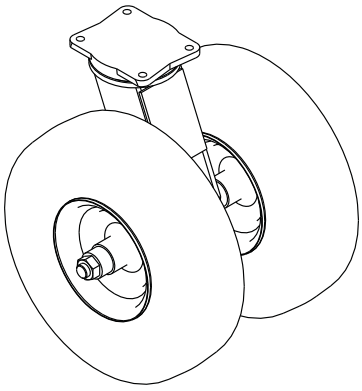
ELECTRICAL HAZARDS: Due to the possibility of electrical current flowing through the rail or the user equipment, use extreme caution when locating the system relative to electrical hazards.

MOVING EQUIPMENT: It is recommended to put the unit in the lowered position before moving. Hazards associated with frame system installations near moving machinery (e.g. conveyors, rotating shafts, rotating gears, etc.) must be addressed either by the frame system design (such as using restraint equipment to prevent contact with moving equipment) or other controls agreed to by the site management.

SHARP EDGES AND ABRASIVE SURFACES: Avoid installing the frame system where fall protection equipment may contact sharp edges or abrasive surfaces that may damage it. If working around sharp edges is unavoidable, provide protection by securing a heavy pad over the exposed edge or use other administrative controls.

WHEEL OPTIONS: The following wheels are available for Boxed-Frame Rail Fall Arrest System applications requiring additional mobility.

Wheel Options for Boxed-Frame Rail Fall Arrest Systems that Require Wheels

8” Solid Urethane	12” Solid Rubber	16” Pneumatic	18” Dual Pneumatic
			

GLIDE RAIL TROLLEYS: Table 1 presents the available Trolley options and defines criteria for selecting the appropriate Trollies for your frame system and Glide 360 rail.

IMPORTANT: After the Glide Rail has been fully installed, reinspect all components for damage, correct orientation, and proper torque on all nuts and bolts. Attach the intended fall arrest equipment (SRLs, Lanyards, etc.) to each Trolley and walk the Trolley the entire length of the Track Assembly to ensure the Trolley Wheels travel smoothly in the Track.

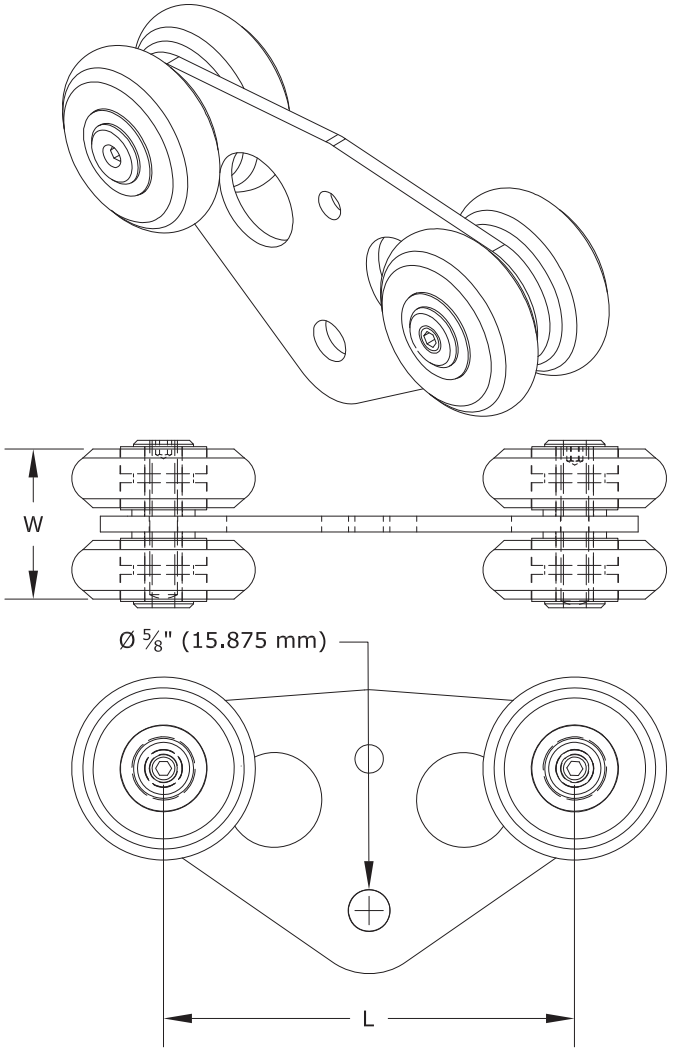
Table 1 - Trolleys

Four-Wheeled, Small-Eyed SRL Trolleys

Connection point for SRLs attached with an approved Double-Locking Carabiner. Small eye minimizes loss of overhead clearance, keeping the worker's attachment point as high as possible relative to their dorsal D-Ring. Model Numbers and dimensions are as follows:

Part	W	L
8521711	2.38″ (60.45 mm)	6.50″ (165.10 mm)
8522028 [1]	2.77″ (70.36 mm)	6.50″ (165.10 mm)

1 Wider wheel-based Trolley for use with "Super Extrusion" Rail Assemblies.

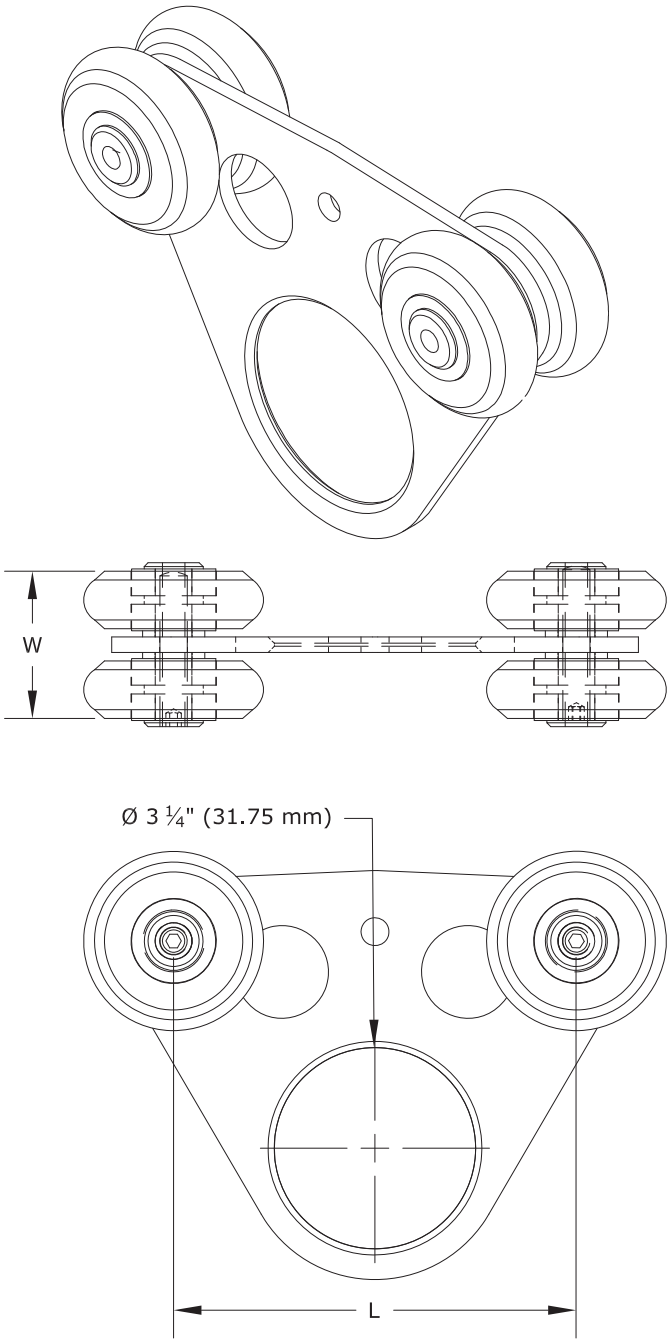


Four-Wheeled, Large-Eyed Lanyard Trolleys

Connection point for Double-Locking Snap Hooks used on various types of Lanyards. Model Numbers and dimensions are as follows:

Part	W	L
8521713	2.38″ (60.45 mm)	6.50″ (165.10 mm)
8525169 [1]	2.77″ (70.36 mm)	6.50″ (165.10 mm)

1 Wider wheel-based Trolley for use with "Super Extrusion" Rail Assemblies.



APPLICATIONS

Purpose: Personal Protective Equipment Against Falls From Height

The frame system combines easy access to elevated work areas with fall protection from the ground for the duration of the work performed. The system included is a horizontal rail assembly with up to four trolleys that ride in track rails to any position along the rail assembly. The trolleys serve as attachment points for the anchorage of a Personal Fall Arrest System (PFAS). If your system is mobile, it can be moved by hand (if small enough), forklift, or towed by a maintenance vehicle when equipped with proper accessories.

Limitations: The following limitations must be considered before using this product. Failure to observe product limitations could result in serious injury or death.

A. ASSEMBLY: The rail system must be assembled in accordance with the requirements stated in this instruction and any instruction provided by the manufacturer.

B. PERSONAL FALL ARREST SYSTEMS: PFAS used with the frame system must meet applicable state and federal regulations.

C. CAPACITY: The maximum capacity for the product is one or more people, each with a combined weight (person, clothing, tools, etc.) of 310 lbs. Use of various accessories may reduce the number of workers that may be anchored.

D. PHYSICAL AND ENVIRONMENTAL HAZARDS: Use of this equipment in areas with physical or environmental hazards may require additional precautions to be taken in order to reduce the possibility of damage to this equipment or injury to the user. Hazards may include, but are not limited to: high heat (welding or metal cutting), acid or caustic chemicals, corrosive environments such as exposure to seawater, high voltage power lines, explosive or toxic gases, moving machinery, or sharp edges. Contact Capital Safety if you have questions about the application of this equipment in areas where physical or environmental hazards are present.

E. TRAINING: This equipment must be installed and used by persons who have been properly trained in its correct application and use. Installation and use of this equipment must be supervised by a qualified person, as defined by OSHA fall protection standards.

STANDARDS: Refer to national standards, local, state, and OSHA requirements for more information on the application of this and associated equipment.

APPLICATION RESTRICTIONS:

IMPORTANT: *Consult system labeling and specifications for user capacities.*

- Depending on the equipment, a maximum of up to four (4) persons may be tied off to the frame at any one time. Review all labels for specific capacities. The combined weight of various Personal Fall Arrest Systems (PFAS), work tools, and accessories may restrict the use of the frame system to a single individual. Consult product specification sheets for all components of any system, and be aware of any restrictions before using the equipment.
- Retractable devices and shock absorbers must have a maximum arrest force (M.A.F.) rating of 900 lbs. (4 kN) or less, and must be installed and used in accordance with the manufacturer's instructions.

SYSTEM REQUIREMENTS

COMPATIBILITY OF COMPONENTS: Capital Safety equipment is designed for use with Capital Safety approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect the safety and reliability of the complete system.

COMPATIBILITY OF CONNECTORS: Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their size and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact Capital Safety if you have any questions about compatibility. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs (22 kN). Connectors must be compatible with the anchorage or other system components.

Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 4). Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and carabiners are required by OSHA and ANSI Z359.1.

CONNECTIONS: Only use self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape, and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

Capital Safety connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user instructions. See Figure 5 for inappropriate connections. Capital Safety snap hooks and carabiners should not be connected to:

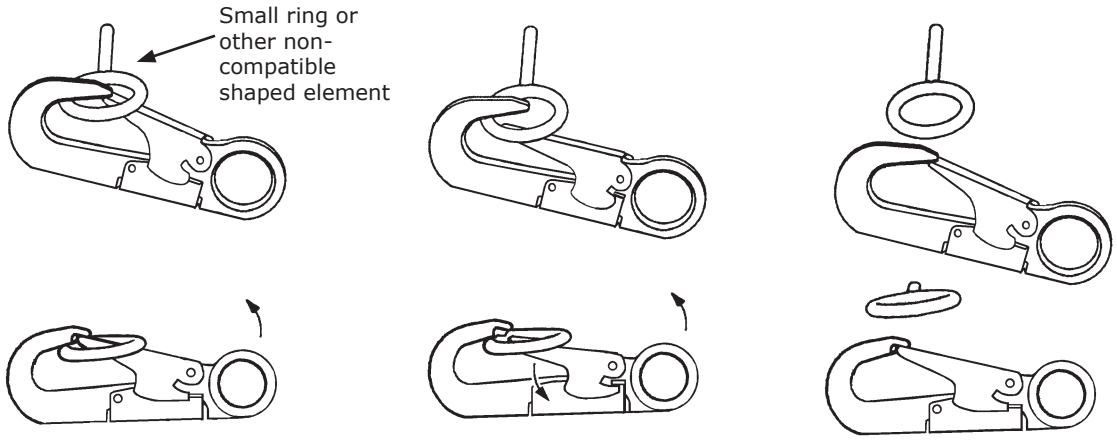
A. To a D-ring which another connector is attached

B. In a manner that would result in a load on the gate

NOTE: *Large throat snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.*

Figure 4 - Unintentional Disengagement (Rollout)

If the connecting element to which a snap hook (shown) or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



1.) Force is applied to the snap hook.

2.) The gate presses against the connecting ring.

3.) The gate opens allowing the snap hook to slip off

C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.

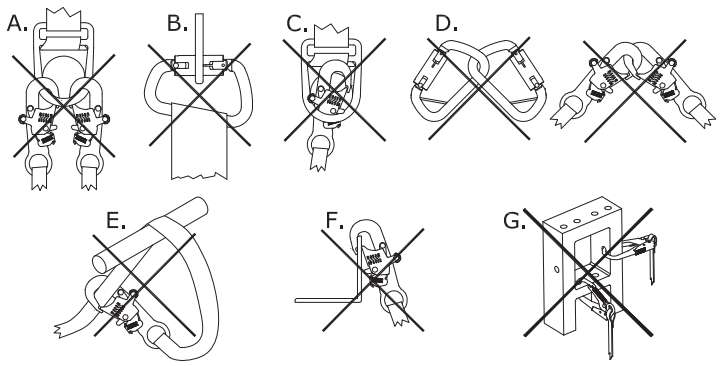
D. To each other.

E. Directly to webbing or rope lanyard or tieback (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).

F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.

G. In a manner that does not allow the connector to align properly under load.

Figure 5 - Inappropriate Connections



ASSEMBLY

When assembling a Frame System, refer to this instruction and any instructions supplied by the manufacturer.

LOWERING AND RAISING A MANUAL ADJUSTABLE FRAME SYSTEM

NOTE: *This section only applies to Frame Systems that are manually adjusted. If your system is hydraulically adjustable, move to the section titled Positioning and Stabilizing the Frame System. If your system is not adjustable, disregard this section and move to the section titled Positioning and Stabilizing the Frame System.*

IMPORTANT: *On each leg of the frame system there is an angle that allows a cross-over connection bar to be installed. This bar allows the user to raise and lower the unit with a small forklift in a safe position.*

Step 1: Position the cross-over connection bar across two legs of the frame system that are on the same end and secure with the provided fasteners.

Step 2: Support the cross-over connection with a forklift rated lifting the weight of the frame system.

Step 3: Using the wheel jacks, raise or lower the system until the pins are loose enough to remove.

Step 4: Remove the pins holding the inner tube through the outer tube of the leg and slowly raise one end of the frame with the forklift. Once the desired height is achieved, replace the pins through both tubes.

Figure 6 - Lift Using the Cross-Over Connection Bar

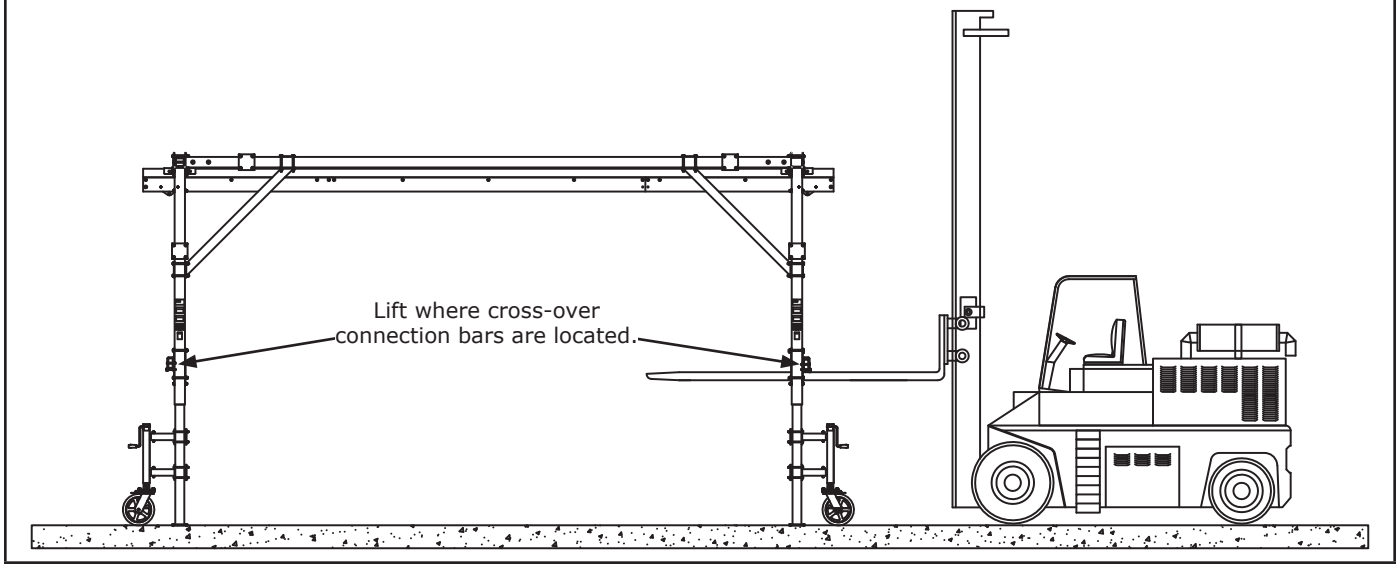
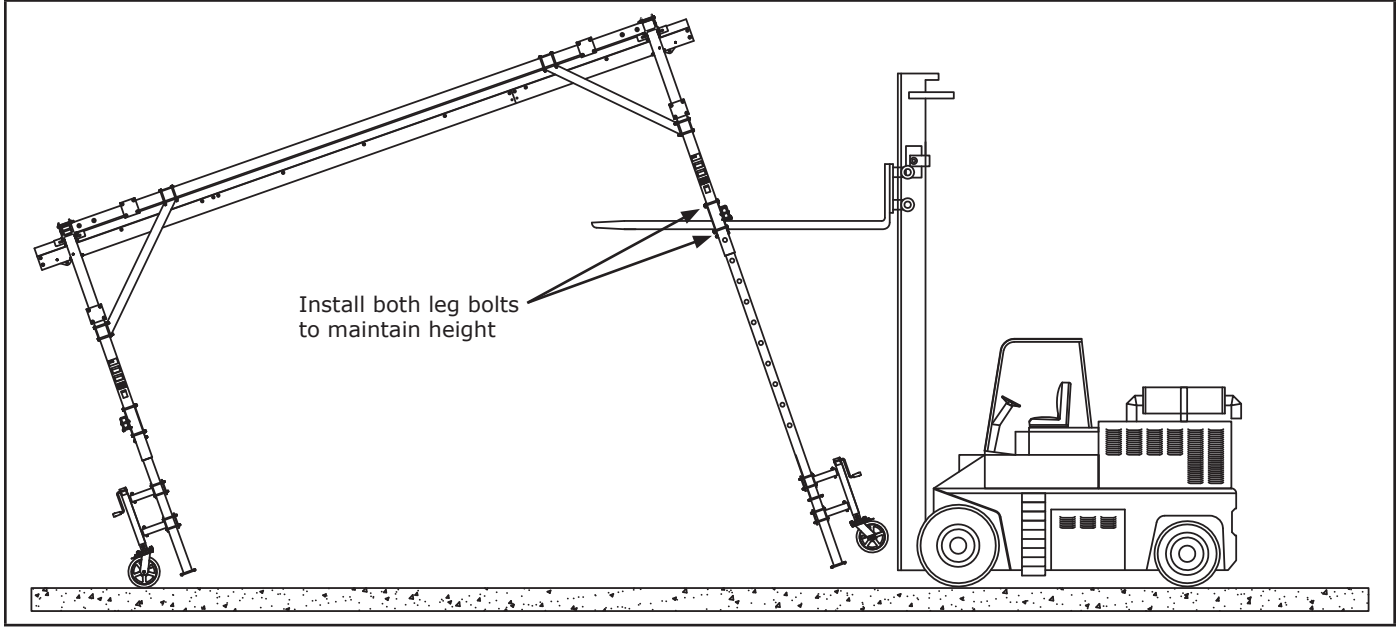
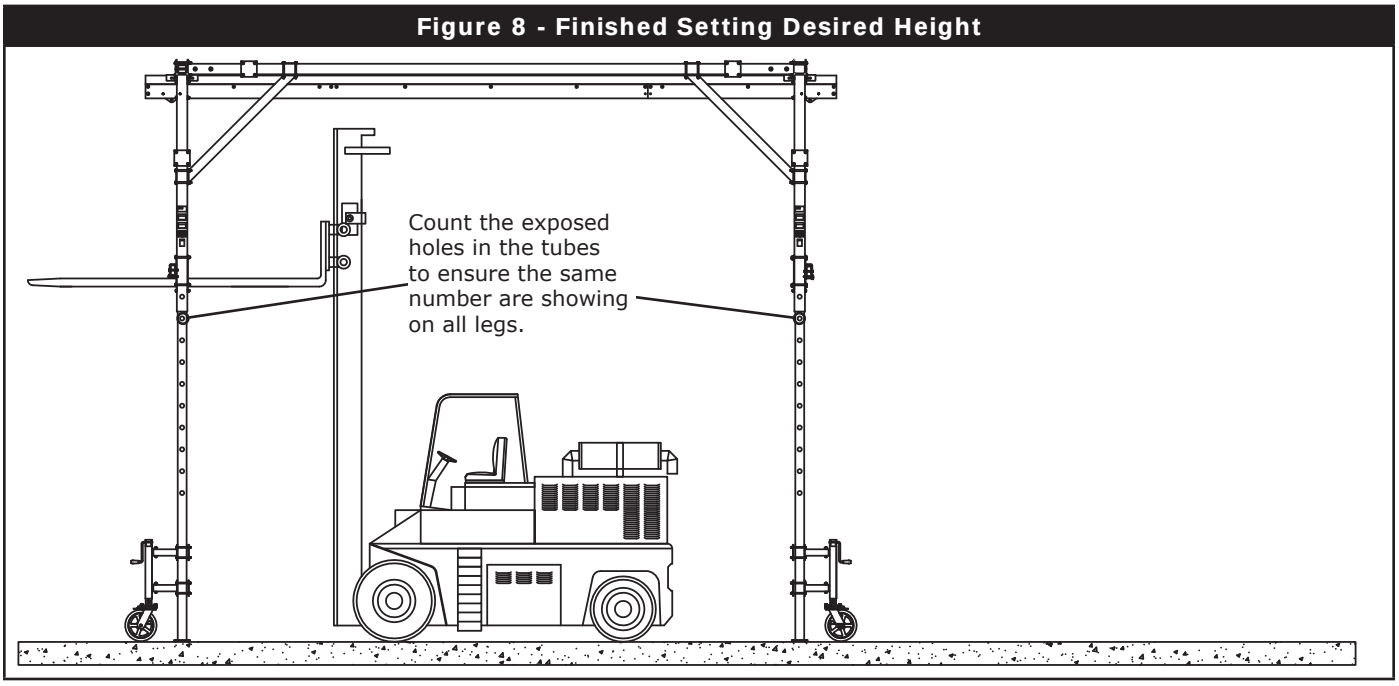


Figure 7 - Setting the Frame System to the Desired Height.



Step 5: Repeat steps 1 and 4 for the two remaining legs on the other side and install the pins to hold position.

Figure 8 - Finished Setting Desired Height



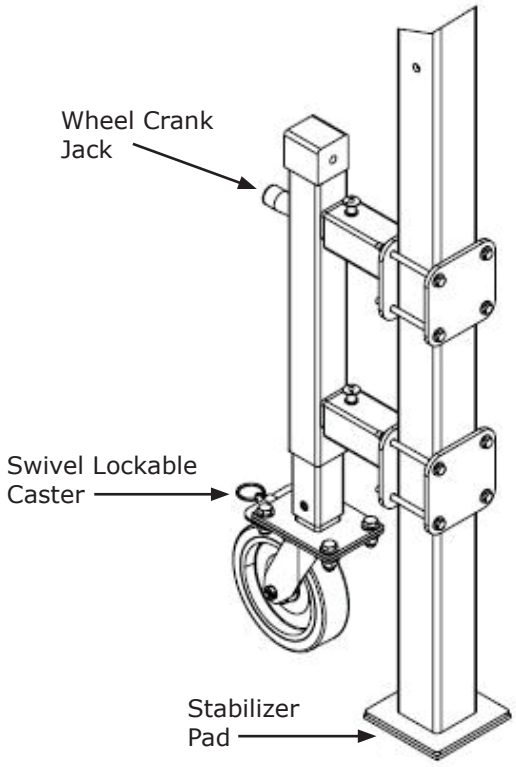
POSITIONING AND STABILIZING THE FRAME SYSTEM

NOTE: *Once the unit is raised and all legs are secured with the provided hardware, the unit can be positioned to the required fall-protection area. It is recommended that the unit be moved in the lowered position.*

IMPORTANT: *Be sure to have someone spot the unit while moving the system near overhead power lines, electrical outlets, or any other dangerous overhead objects.*

Step 1: To move the unit, crank on the leg jack assemblies until the wheel caster is on the ground and the stabilizer pad is up and off the ground.

Figure 9 - Lowering and Raising the Adjustable Frame System



Wheel Crank Jack	Designed to lower and raise the wheel assembly
Swivel Lockable Caster Assembly	Pull out and rotate 90 degrees to allow the wheel to caster 360 degrees
Stabilizer Pad	Designed to be on the ground when the unit is use for fall-arrest

IMPORTANT: *This unit is not intended for use on un-level ground. Be sure the area where the Frame System will be used is level.*

Step 2: After the frame system is in position on a level surface, raise the Swivel Lockable Caster up so the Stabilizer is firmly planted on the ground.

NOTE: *Use a level to verify that the system is level.*

LOWERING AND RAISING A HYDRAULIC ADJUSTABLE FRAME SYSTEM

NOTE: *This section only applies to Frame Systems that are hydraulically adjusted. If your system is not hydraulically adjustable and has been properly set up, disregard this section and move to the section titled Operation and Use.*

Figure 10 - Hydraulic Adjustable Frame System - Round Leg

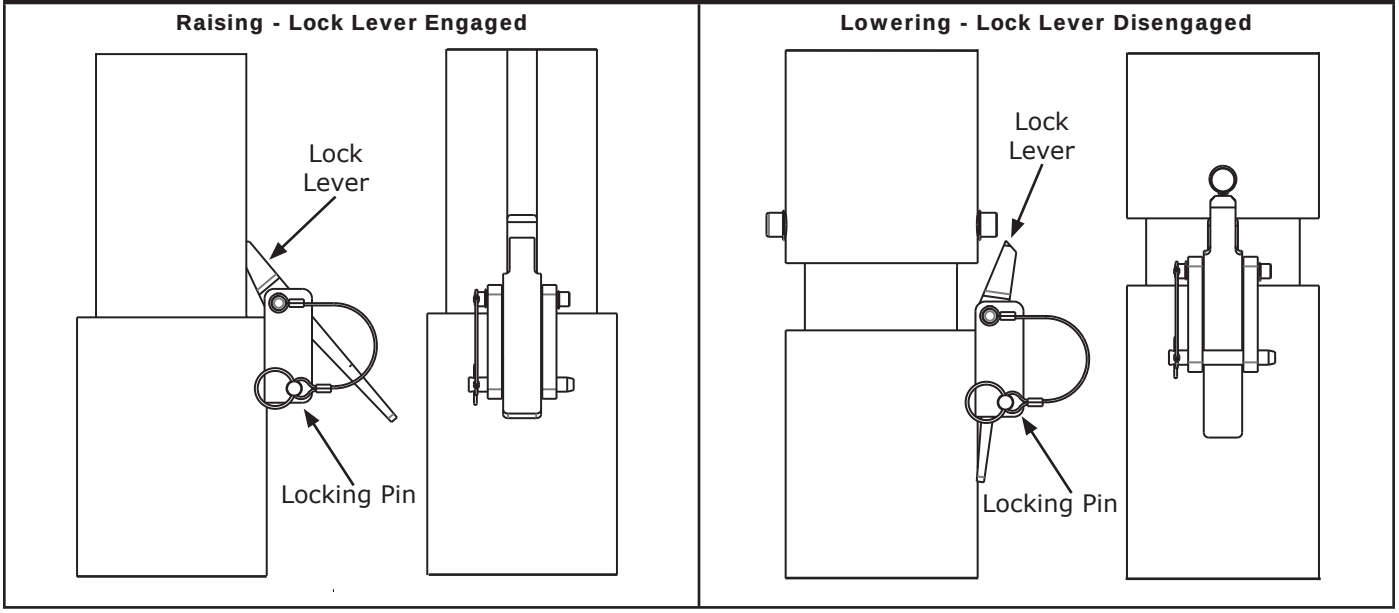
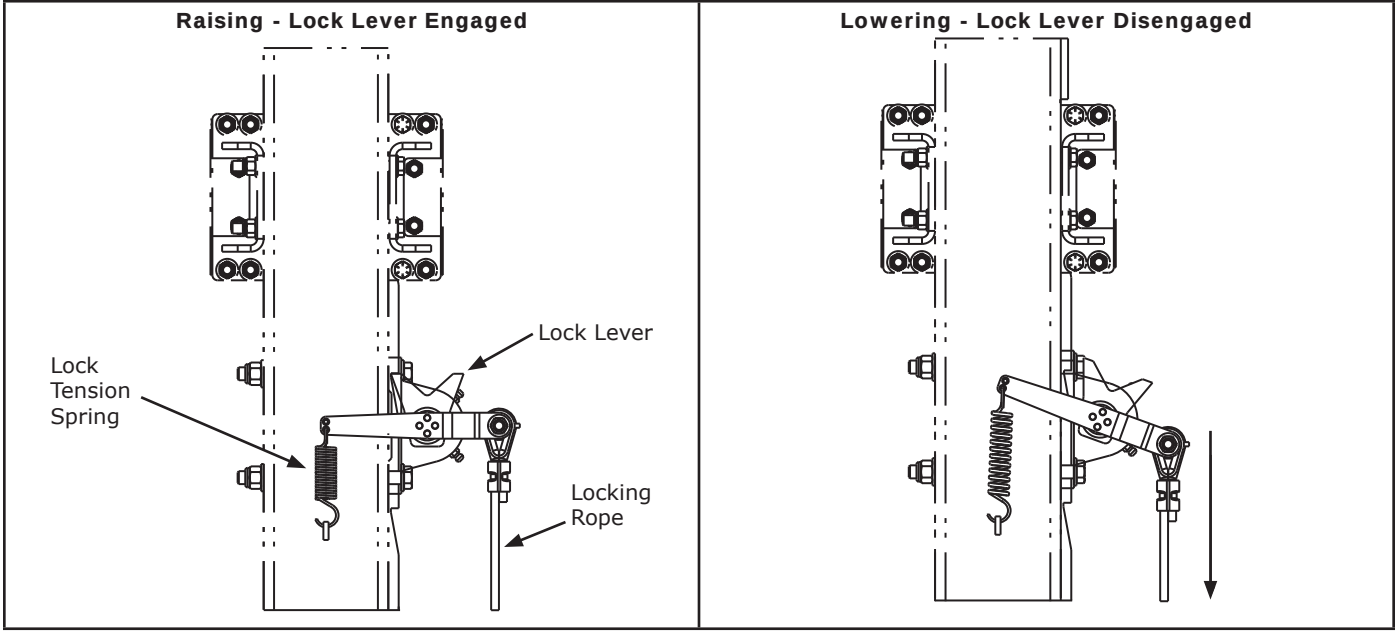


Figure 11 - Hydraulic Adustable Frame System - Square Leg



RAISING THE HYDRAULIC FRAME SYSTEM:

Step 1: Verify the frame system is on level ground.

Step 2: Crank the wheels until they are completely off the ground and verify the frame system is firmly resting on the support pads.

Step 3: Unwrap the hydraulic hoses and connect them to the power unit. Verify the hose connections are secure and properly connected.

IMPORTANT: *The hydraulic hoses and power unit must be inspected before each use. Verify the hydraulic hoses are not leaking, cracked, kinked, or contain any other defect that could cause them to fail. Inspect the hydraulic fittings to ensure they are not leaking and working properly. Inspect the power unit according to the supplied manufacturer's instructions.*

Step 4: On the frame system, release the four (4) lock levers so they are in the "Engageg Position".

Step 5: Plug in the power unit's electrical cord.

IMPORTANT: *Be sure to have someone spot the frame system while raising the system near overhead power lines, electrical outlets, or any other dangerous overhead objects.*

Step 6: Press the I/START button on the power unit.

Step 7: After the power unit starts, move the lever and raise the frame system to the desired height.

NOTE: *While the frame system is raising, the lock levers will make a 'clicking' sound as they engage the lock notch.*

Step 8: After the frame system has reached the desired height, verify the lock levers are seated into a locking notch. If the lock levers are not engaged in a locking notch, raise or lower the unit until they are seated in the lock notches.

IMPORTANT: *Do not disconnect the hydraulic lines from the power unit until after reading and understanding Disconnecting the Power Unit section.*

DISCONNECTING THE POWER UNIT

IMPORTANT: *Failure to properly disconnect the hydraulic lines from the power unit can cause the system to pressure lock. If pressure lock occurs, move the control lever back-and-forth until the pressure gauge reads zero (0).*

Step 1: Power off the power unit.

Step 2: Move the hydraulic control level back-and-forth until the hydraulic pressure gauge reads zero (0).

Step 3: Disconnect the hydraulic lines from the power unit.

NOTE: *After the lock levers are engaged in the lock notches, the hoses can be disconnected from the power unit and the power unit can be stored in the recommended environment.*

LOWERING THE HYDRAULIC FRAME SYSTEM

IMPORTANT: *If the hydraulic hoses were disconnected from the power unit, attach them according to steps 3, 5, 6, 7, and 8 in the previous section.*

Step 1: With the power unit turned on and properly hooked up to the frame system, raise the frame system until the lock levers are disengaged from the lock notches.

Step 2: After the lock levers are disengaged from the lock notches, secure them in the disengaged position (see Figures 10 & 11).

Step 3: After the lock levers have been secured in the disengaged position, move the lever in the lowering position until the frame system reaches the desired height.

Step 4: After the frame system has reached the desired height, engage the lock levers. If the system is not completely lowered, continue lowering the system until the lock levers are seated into a locking notch. If the lock levers are not engaged in a locking notch, raise or lower the unit until they are seated in the lock notches.

NOTE: *After the lock levers are engaged in the lock notches, the hoses can be disconnected and the power unit can be stored in the recommended environment.*

TOWING THE SYSTEM

Towing kits are an optional accessory for a box frame system. If your system was not supplied with this accessory please skip to the next section.

Towing kits come in two basic styles: tow bar style (Figure 12) and fork pocket style (Figure 13).

Tow bar style is intended for pintle or ball style hitches. This style towing kit includes a tow bar that pivots in one direction and can be be towed by many different types of vehicles.

Fork pocket style is intended to be chained or strapped to the forks of a forklift. It rotates horizontally and is great for both push and pull applications.

Figure 12 - Towing Kit Installation and Use - Tow Bar Style

STEP 1: If not yet installed, install the clamp assemblies onto all for legs. make sure all clamps are oriented with the detent pins facing outward.

STEP 2: Remove the detent pins from the clamp assemblies. Attach the tow bar hich reciever tube to the leg clamp assemblies on the desired side of the system.

STEP 3: Re-insert the detent pins to secure the hitch reciever tube into position.

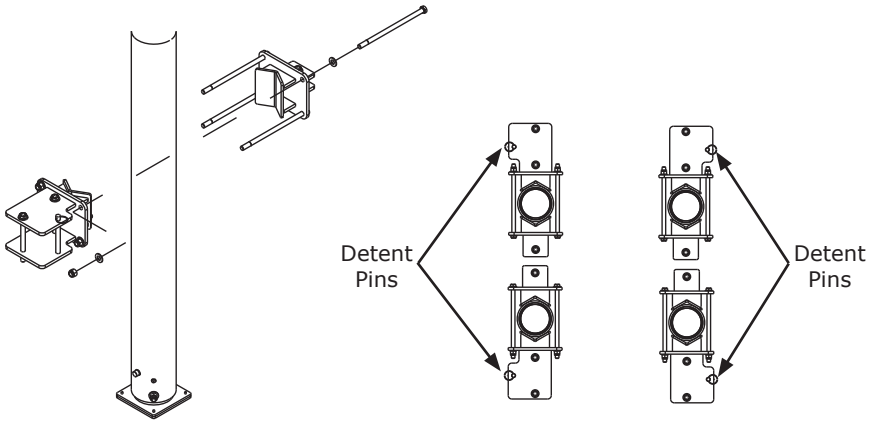
STEP 4: Insert the tow bar assembly into the hitch receiver pocket and secure using the supplied hitch pin.

STEP 5: Attach the leg connector tubes between the front and rear clamp assemblies on both sides of the unit. Secure using detent pins.

STEP 6: The system is now ready for towing. See the warnings above.

WARNING: *Do not tow this system at speeds greater than 5 mph (8 kph). Do not tow adjustable systems in any position but fully lowered. All Cross leg support bars (if supplied) must be secured into position before the system can be towed. When transporting this system, be aware of overhead obstructions and power sources which may cause damage to the system and/or electrocution resulting in serious injury or death.*

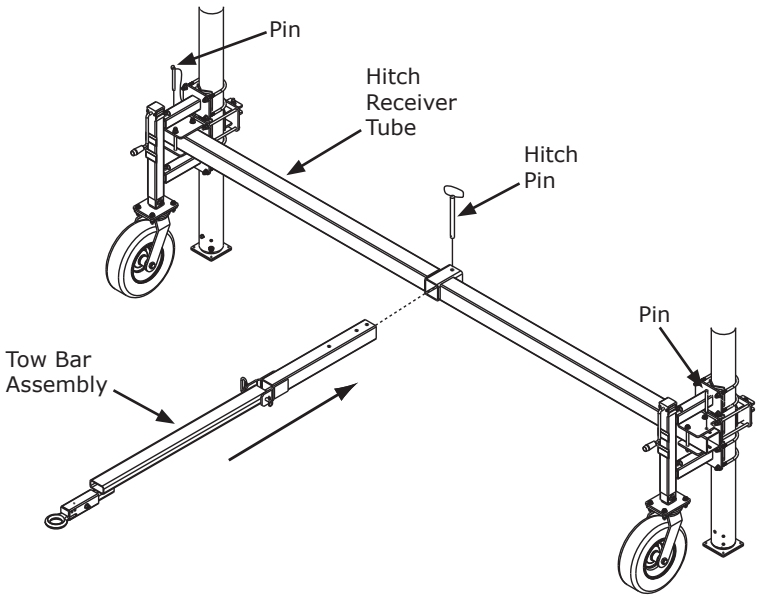
Step 1:



NOTE: *Wheel hidden for clarity*

NOTE: *Orient clamps as shown with detent pins facing outward.*

Steps 2, 3 & 4:



Step 5:

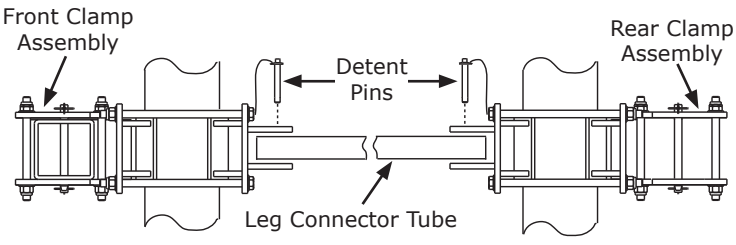


Figure 13 - Towing Kit Installation and Use - Fork Pocket Style

STEP 1: Using a crane or forklift set the fork pocket tube assembly into position on the desired side of the system. Secure using the supplied pin and clevis assemblies.

STEP 2: Set the remaining leg connecting tubes into postion and secure them using the supplied pin and clevis assemblies.

STEP 3: Insert both forks from the forklift that will be transporting the system all the way into the fork pockets.

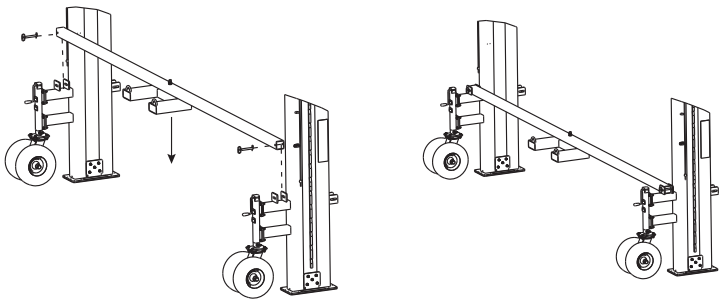
STEP 4: Secure the forklift carriage to the fork pocket hooks using ratchet straps or chain.

STEP 5: The system is now ready to be towed. Caster rotation locks may need to be engaged on the two wheels opposite the side that is being towed to maintain optimal towing control.

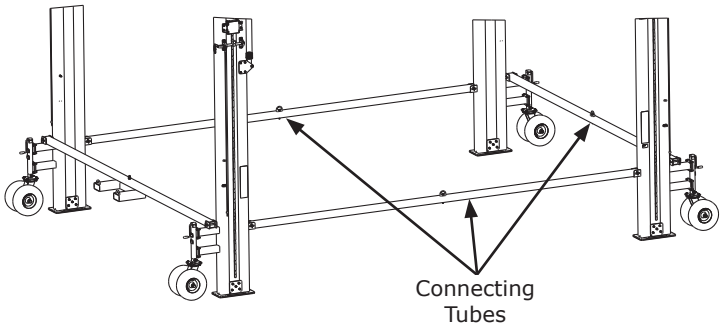
NOTE: *Ensure straps and chains are rated appropriately for the system that is to be towed.*

WARNING: *Do not tow this system at speeds greater than 5 mph (8 kph). Do not tow adjustable systems in any position but fully lowered. All Cross leg support bars (if supplied) must be secured into position before the system can be towed. When transporting this system, be aware of overhead obstructions and power sources which may cause damage to the system and/or electrocution resulting in serious injury or death.*

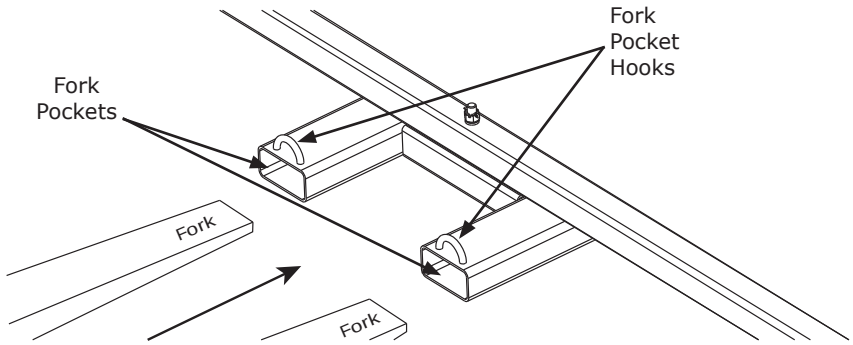
Step 1:



Step 2:



Steps 3 & 4:



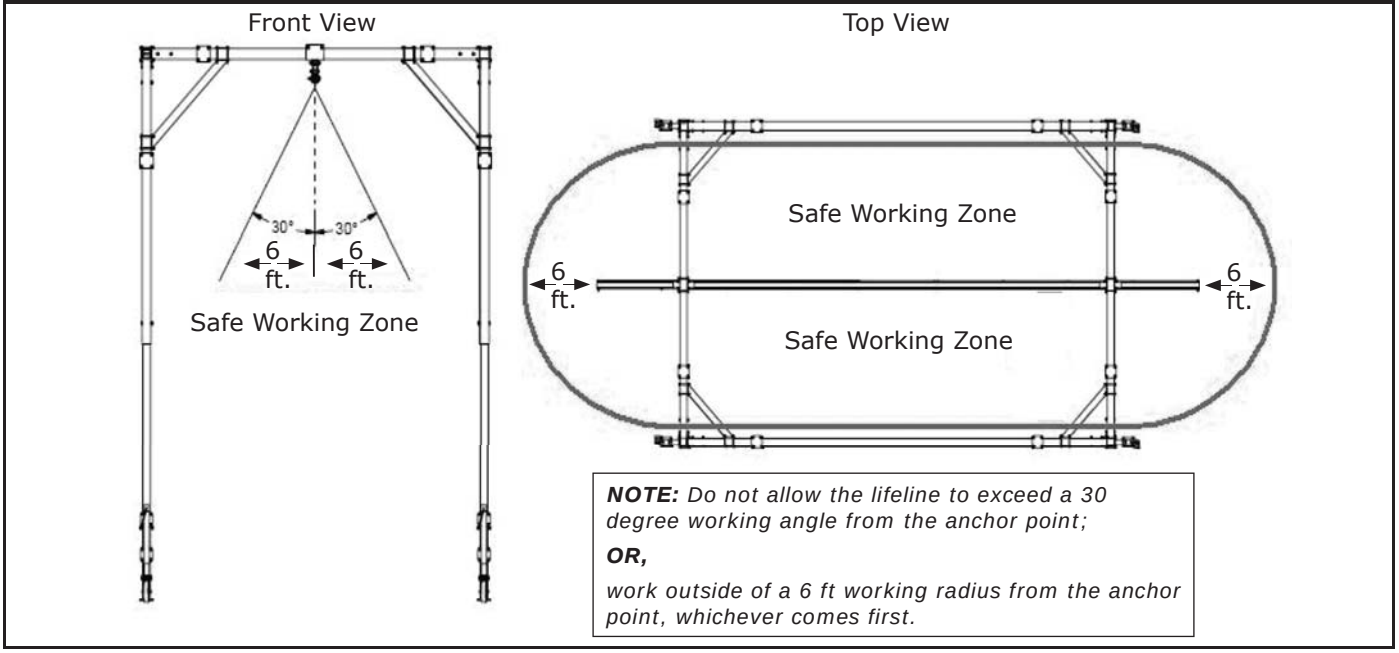
OPERATION AND USE

WARNING: *Do not alter or intentionally misuse this equipment.*

WARNING: *Consult Capital Safety when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.*

WARNING: *Working at height has inherent risks. Some risks are noted here but are not limited to the following: falling, suspension/prolonged suspension, striking objects, and unconsciousness. In the event of a fall arrest and/or subsequent rescue (emergency) situation, some personal medical conditions may affect your safety. Medical conditions identified as risky for this type of activity include but are not limited to the following: heart disease, high blood pressure, vertigo, epilepsy, drug or alcohol dependence, psychiatric illness, impaired limb function, and balance issues. Capital Safety recommends that your employer/physician determine if you are fit to handle normal and emergency use of this equipment.*

Figure 14 - Safe Working Zone


Front View
Top View
30°
30°
6 ft.
6 ft.
Safe Working Zone
Safe Working Zone
6 ft.
6 ft.
Safe Working Zone
NOTE: Do not allow the lifeline to exceed a 30 degree working angle from the anchor point;
OR,
work outside of a 6 ft working radius from the anchor point, whichever comes first.

BEFORE EACH USE: Inspect this equipment carefully to ensure it is in good working condition. Check for worn or damaged parts. Ensure all parts are present and secure. Check the entire system for damage and corrosion. Do not use if inspection reveals an unsafe condition.

PLANNING: Plan your system and how it will function before starting your work. Consider all factors that affect your safety during use. Some important points to consider when planning your system are:

- **A. HAZARD EVALUATION:** Evaluate job site hazards prior to starting work. Consult applicable OSHA (or CE) and industry standards for guidelines and regulatory requirements on equipment such as personal fall arrest systems (PFAS).
- **B. WORK SITE GEOMETRY:** The use of the frame system and attached PFAS must be consistent with the geometric requirements stated in the manufacturer's instruction manual(s). Check for obstructions or sharp edges in the work path. Avoid working where the user may swing and hit an object, or where lines may cross or tangle with that of another worker.
- **C. FALL CLEARANCE:** There must be sufficient clearance in your fall path to prevent striking an abject or lower level in the event of a fall. A minimum of 6 ft. (1.8 m) from the working level to the lower level or nearest obstruction is recommended but may vary with you application and attached PFAS. See the PFAS manufacturers' instructions.
- **D. SWING FALLS:** Swing Falls occur when the anchorage point is not directly overhead. The force of striking an object in a Swing Fall may cause serious injury or death. Minimize Swing Falls by maintaining a work position as directly below the anchorage point as possible. In planning your system, increased clearance is required with Self-Retracting Lifelines or other variable length subsystems to negate the possibility of Swing Falls.
- **E. SHARP EDGES:** Avoid working where components of the Boxed-Frame Rail Fall Arrest System and attached subsystem(s) will contact with or abrade against unprotected sharp edges.
- **F. RESCUE:** When using this equipment, the employer must have a rescue plan and the means at hand to implement it and communicate that plan to users, authorized persons, and rescuers.
- **G. AFTER A FALL:** Any equipment which has been subjected to the forces of arresting a fall or exhibits damage consistent with the effect of fall arrest forces as described, must be removed from service immediately and destroyed by the user, the rescuer, or an authorized person.

REQUIREMENTS FOR PERSONAL FALL ARREST SYSTEMS (PFAS): PFAS used with the frame system must meet applicable OSHA requirements.

The PFAS should be rigged to minimize any potential free fall and never allow a free fall greater than six (6) ft. (1.8 m). The PFAS used with this equipment are required to include a full body harness as the body support component. PFAS that incorporate full body harnesses must maintain fall arrest forces below 1,800 lbs. (8.0 kN) and arrest the fall within 42 in. (1.1 m). Body belts, unless incorporated into a full body harness, are not allowed for use with this equipment. A typical PFAS includes a full body harness, connecting subsystem or component (self retracting lifeline or shock absorbing lanyard), and the necessary connectors to couple the system together. PFAS may only be attached to the Trolleys which move along the Rail Assembly.

WARNING: *Read and follow the manufacturer's instructions for the personal fall arrest equipment selected for use with the frame system.*

IMPORTANT: *Body belts are not allowed for free fall situations. Body belts increase the risk of injury during fall arrest in comparison to a full body harness. Limited suspension time and the potential for improperly wearing a body belt may result in added danger to the user's health.*

USING THE BOXED-FRAME RAIL FALL ARREST SYSTEM: General steps for using the frame system are as follows:

Step 1. **Position the frame system around the desired work area/object:** Push the unit into position so that the Rail Assembly is centered in the work area to maximize the effective safe work area and reduce the potential for a fall (see Figure 14). Wheels and Jacks must be positioned over a stable, level surface or leveled with blocks.

Step 2. **Don a Full Body Harness:** Don a Full Body Harness per the manufacturer's instructions.

Step 3. **Connect the SRL Lifeline to the Full Body Harness:** Connect the Self Locking Snap Hook or Self Locking/Self Closing Carabiner on the end of the SRL Lifeline to the Front or Back D-Ring on the Full Body Harness. To ensure a safe connection, always follow the instructions provided in the SRL and Full Body Harness manufacturers' instructions and observe the requirements in this manual regarding *Compatibility of Connectors* and *Connections*.

Step 4. **When attached to the SRL:** The worker is free to move about within recommended working areas at normal speeds. The Trolley should roll freely in the Rail Assembly. The Lifeline should extend smoothly and retract without hesitation. If slack line condition is created in normal use, the unit should be inspected and serviced by an authorized service center. Should a fall occur, the SRL will lock and arrest the fall. Upon rescue, remove the SRL from use. Inspect as described in manufacturer's instructions. When working with the SRL, allow the lifeline to recoil back into the device under control. Allowing the lifeline to be fully extended for long periods of time may cause premature weakening of the retraction spring.

NOTE: *A Tagline should be attached to the SRL's Lifeline Hook so the Lifeline can be pulled down to a proper position for connection to the Full Body Harness.*

IMPORTANT: *A maximum of four (4) persons may be attached to the frame system; each using an individual Trolley and SRL. No more than one (1) person should be attached to a single Trolley at any time.*

NOTE: *The SRL line must not drag or bend over a leading edge while accessing the work area. To eliminate that problem reposition the unit. Follow the SRL manufacturer's instructions carefully.*

TRAINING

It is the responsibility of all users of this equipment to understand these instructions, and are trained in the correct installation, use, and maintenance of this equipment. These individuals must be aware of the consequences of improper installation of this equipment. Users must also be aware of the operating characteristics, application limits, and the consequences of improper use of this equipment. This user manual is not a substitute for a comprehensive training program. Training must be provided on a periodic basis to ensure proficiency of the users.

IMPORTANT: *Training must be conducted without exposing the trainee to a fall hazard. Training should be repeated on a periodic basis.*

INSPECTION

IMPORTANT: *After the frame system has been fully installed, perform a complete inspection. Make sure all supplied labels are present and legible. Inspect for loose bolts, cracks, corrosion, or any other type of abnormality. Inspect the Glide Rail and its components to ensure the trolleys roll smoothly along the entire span of the system. Check all nuts and bolts for proper torque and orientation.*

FREQUENCY: Before each use, visually inspect per steps listed in this instruction.

IMPORTANT: *If this equipment has been subjected to forces resulting from the arrest of a fall, it must be immediately removed from service and destroyed or returned to Capital Safety for possible repair.*

INSPECTION STEPS:

Step 1. Inspect the frame system for physical damage. Look carefully for any signs of cracks, dents, or deformities in the metal. Make certain the components are not deformed in any way and that they move correctly.

Step 2. Inspect the frame system for signs of excessive corrosions.

Step 3. Ensure the condition of the mounting surface will support system loads.

Step 4. Inspect each system component or subsystem (e.g. self-retracting lifeline, full body harness, etc.) per associated manufacturer's instructions.

Step 5. If the Boxed-Frame Rail Fall Arrest System includes the hydraulic adjustment option, inspect all hoses and fittings for cracks, damage, or excessive wear. Inspect the lever lock mechanisms on all legs for proper functionality. Inspect the power unit per the manufacturer's instructions. If any part of the system inspection uncovers questionable conditions, remove the system from service and contact Capital Safety.

Step 6. Record the inspection date and results on the inspection log.

IMPORTANT: *Only Capital Safety or parties authorized in writing may make repairs to this equipment.*

MAINTENANCE - SERVICING - STORAGE

WHEEL MAINTENANCE: If the wheel assembly has grease zerks, ensure they are properly greased every six months.

NOTE: *Not all Boxed-Frame models have a grease zerk for the wheel assembly. If the Boxed-Frame wheel assembly doesn't have a grease zerk, then the wheel assembly should not be greased.*

JACK MAINTENANCE: If the Top-Wind Jacks have grease zerks, ensure they are properly greased every month.

NOTE: *Not all Boxed-Frame models have a grease zerk for the Top-Wind Jacks. If the Top-Wind Jack doesn't have a grease zerk, then the jack assembly should not be greased.*

CLEANING: Clean the Boxed-Frame Rail Fall Arrest System with a mild soap detergent solution. Excessive buildup of dirt, tar, etc. may prevent the system from working properly. If you have any questions concerning the condition of your frame system or have any doubt about putting it into service, contact Capital Safety.

NOTE: *Additional maintenance and servicing procedures (i.e. replacement parts) must be completed by a factory authorized service center. Authorization must be in writing.*

STORAGE: The Boxed-Frame Rail Fall Arrest System is designed for storage outdoors during normal weather conditions. If the weather environment is severe, it is recommended to store the Boxed-Frame system in an area that prevents damage to the system.

HYDRAULIC SYSTEMS (if so equipped): Hydraulic Boxed-Frame Rail Fall Arrest Systems must have roller assemblies and moving parts lubricated with a non-corrosive lube every 20 cycles or monthly (whichever comes first). Refer to the hydraulic system manufacturer's product instructions for additional maintenance and service information, including recommended power unit maintenance.

The hydraulic system's power unit must be stored indoors in a dry, clean environment.

IMPORTANT: *Additional maintenance and servicing of the hydraulic system (parts replacement, etc) must be performed by a factory authorized service center. Authorization must be in writing.*

SPECIFICATIONS

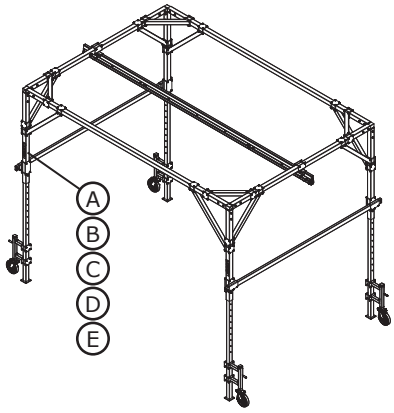
Materials and Finish	Zince plated or powder coated, 6061-T6 aluminum anodized, steel anchor plate.
Hardware	Grade 5/Grade 8 zinc plated.
Capacity	The maximum working load for this product is one (1) or more person(s) (check system labeling for approved number of users) with a combined weight of 310 lbs. (141 kg) per person. Only one person and PFAS may be connected to a trolley. Use of various accessories may reduce the number of workers that may be anchored.
Static Load Capacity	Strength of system maintains a minimum safety factor of 2 as required by OSHA when according to this user instruction manual (reference OSHA 1926.502 and 1910.66)/

TERMINOLOGY

Authorized Person	A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard (otherwise referred to as "user" for the purpose of these instructions).
Rescuer	Person or persons other than the rescue subject acting to perform an assisted rescue by operation of a rescue system.
Certified Anchorage	An anchorage for fall arrest, positioning, restraint, or rescue systems that a qualified person certifies to be capable of supporting the potential fall forces that could be encountered during a fall or that meet the criteria for a certified anchorage prescribed in this standard.
Qualified Person	A person with a recognized degree or professional certificate and with extensive knowledge, training, and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating, and specifying fall protection and rescue systems to the extent required by this standard.
Competent Person	One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

LABELING

The following labels should be securely attached to the frame system and fully legible:



A

DBI SALA
www.capitalsafety.com
Capital Safety
Red Wing, MN, USA
+800-328-6146
SERIAL NO. XXXXX
MFRD(YM): LOT NO.: MODEL NO.: LENGTH (FT):

B

WARNING

This product is approved for use with retractable devices and shock absorbers with a MAXIMUM ARRESTING FORCE (M.A.F.) RATING OF 900 lb (4 kN) OR LESS. Retractable devices and shock absorbers must be installed, maintained and used according to the manufacturer's instructions.

Pt# 13818

C

WARNING

YOU MUST READ AND UNDERSTAND THE OPERATOR'S MANUAL OR HAVE INSTRUCTIONS EXPLAINED TO YOU BEFORE USING THIS PRODUCT.

Not following the instructions in the operator's manual can cause serious injury or death.

Pt# 15570

D

WARNING

This man-rated system is designed for a maximum

1 2 3 4

person(s) user capacity in accordance with manufacturer's instructions.

Pt# 20099

E

DANGER

ELECTROCUTION HAZARD

WATCH FOR OVERHEAD POWER LINES

Pt#. 16399

F

2

NOTE: *Example at right is for illustration only. When ordering a replacement label, please specify 7 digit part number in lower left corner.*

G

FlexiGuard
CUSTOM FALL PROTECTION SOLUTIONS

STEP 1: POSITION FRAMED SYSTEM ON A FLAT SURFACE AND RAISE THE WHEELS UNTL THEY SPIN FREELY AND THE SUPPORT LEG FOOTPADS ARE FIRMLY ON THE GROUND.

STEP 2: REMOVE THE PINS TO RELEASE THE SPRING LOADED LOCKING PAWLS ON EACH LEG **SEE FIGURE 1.**

STEP 3: UNWRAP HYDRAULLIC HOSES FROM THEIR STORAGE AREA AND CONNECT THEM TO THE APPROPRIATE CONNECTION POINTS ON THE POWER UNIT CART.

STEP 4: ENSURE THE POWER UNIT CART IS NO MORE THAN 4 FEET AWAY FROM THE HOSE EXIT ON THE FRAME SYSTEM. THIS ENSURES THERE IS SUFFICIANCT SLACK IN THE HOSES TO ALLOW FOR FULL SYSTEM ADJUSTMENT.

STEP 5: PLUG THE POWER UNIT CART INTO A 120 VOLT POWER SOURCE.

STEP 6: PRESS THE POWER BUTTON ON THE POWER UNIT CART TO ON. PRESS AND HOLD THE DIRECTIONAL CONTROL LEVER IN THE RAISE DIRECTION TO RAISE THE SYSTEM TO THE DESIRED HEIGHT.

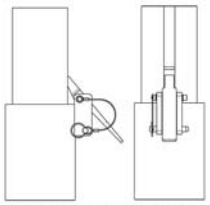
STEP 7: ONCE THE DESIRED HEIGHT HAS BEEN ACHIEVED, PULL THE LEVER IN THE LOWER DIRECTION TO SEAT THE SYSTEM ON ALL FOUR SPRING LOADED LOCKING PAWLS.

STEP 8: TO LOWER SYSTEM, RAISE THE UNIT TO ALLOW THE LOCKING PAWLS TO BE DISENGAGED.

STEP 9: PIN ALL FOUR LOCKING PAWLS BACK INTO THEIR STORAGE POSITIONS. SYSTEM CANNOT BE LOWERED UNTIL ALL FOUR PAWLS ARE SECURELY DISENGAGED **SEE FIGURE 1.**

STEP 10: PRESS AND HOLD THE DIRECTIONAL CONTROL LEVER IN THE LOWER DIRECTION TO FULLY RETRACT THE SYSTEM. IF THE SYSTEM IS TO BE LOWERED TO ANY POSITION BUT FULLY RETRACTED, THE LOCKING PAWLS MUST BE ENGAGED AND THE SYSTEM MUST BE SEATED ON THEM.

FIGURE 1
PAWL ENGAGED



PAWL DISENGAGED
STORAGE POSITION

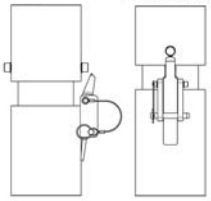
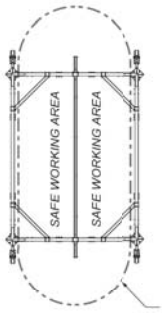


FIGURE 2



WARNING

- IF SYSTEM IS EQUIPPED WITH A TOW BAR, DO NOT TOW AT SPEEDS GREATER THAN 5 MPH / 8 KPH. DO NOT TOW ADJUSTABLE SYSTEMS IN ANY POSITION BUT FULLY LOWERED.
- NEVER USE SYSTEM FOR FALL PROTECTION IF WHEELS ARE CONTACTING THE GROUND.
- NEVER EXCEED MAXIMUM USER RATING.
- ALL USERS MUST READ AND UNDERSTAND THE INSTRUCTIONS PRIOR TO USING SYSTEM.
- DO NOT DISCONNECT HOSES FROM POWER UNIT CART UNTIL PRESSURE GAUGE READS ZERO (FLOW HANLDE CAN ME MOVED WITH POWER UNIT OFF TO RELEASE PRESSURE INTO TANK). FAILURE TO DO SO MAY CAUSE SYSTEM PRESSURE lOCK.
- TRANSFERRING FROM ONE SRL TO ANOTHER MUST BE DONE SO YOU ARE ATTACHED TO AT LEAST ONE SRL AT ALL TIMES.
- NO MORE THAN ONE PERSON IS ALLOWED TO BE ATTACHED TO A GLIDE RAIL TROLLEY AT ANY GIVEN TIME.
- SYSTEM USERS MUST STAY WITHIN THE SAFE WORKING AREA SEE **FIGURE 2.**

95XXXXX REV A

THIS MAN-RATED SYSTEM IS DESIGNED FOR A MAXIMUM OF

F **PERSON(S)**

USER CAPACITY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY OR DEATH.

DBI SALA

INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:	
MODEL NUMBER:	
DATE PURCHASED:	**DATE OF FIRST USE:**

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
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Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			

This instruction applies to the following Models:					
8525301 8530038	8530067 8530117	8530147 8530180	8530189 8530245	8530324 8530345	8530491
Additional Model Numbers may appear on the next printing of these instructions.					

LIMITED LIFETIME WARRANTY

Warranty to End User: D B Industries, Inc., dba CAPITAL SAFETY USA ("CAPITAL SAFETY") warrants to the original end user ("End User") that its products are free from defects in materials and workmanship under normal use and service. This warranty extends for the lifetime of the product from the date the product is purchased by the End User, in new and unused condition, from a CAPITAL SAFETY authorized distributor. CAPITAL SAFETY'S entire liability to End User and End User's exclusive remedy under this warranty is limited to the repair or replacement in kind of any defective product within its lifetime (as CAPITAL SAFETY in its sole discretion determines and deems appropriate). No oral or written information or advice given by CAPITAL SAFETY, its distributors, directors, officers, agents or employees shall create any different or additional warranties or in any way increase the scope of this warranty. CAPITAL SAFETY will not accept liability for defects that are the result of product abuse, misuse, alteration or modification, or for defects that are due to a failure to install, maintain, or use the product in accordance with the manufacturer's instructions.

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